

Qty.	Description
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1	CR 5-6 A-A-A-E-HQBE
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Note! Product picture may differ from actual product

Product No.: On request

Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling.

The pump is fitted with a 3-phase, fan-cooled asynchronous motor.

Further product details

Steel, cast iron and aluminium components have an epoxy-based coating made in a cathodic electro-deposition (CED) process.

CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

An integral part of the process is a pretreatment.

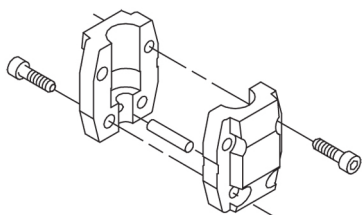
The entire process consists of these elements:

- 1) Alkaline-based cleaning.
- 2) Zinc phosphating.
- 3) Cathodic electro-deposition.
- 4) Curing to a dry film thickness 18-22 my m.

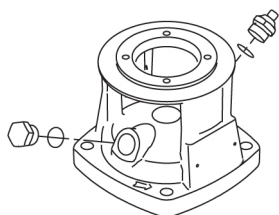
The colour code for the finished product is NCS 9000/RAL 9005.

Pump

A standard split coupling connects the pump and motor shaft. It is enclosed in the pump head/motor stool by means of two coupling guards.



The pump head, pump head cover and flange for motor mounting is made in one piece. The pump head has a combined 1/2" priming plug and vent screw.



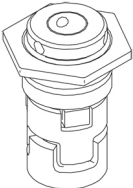
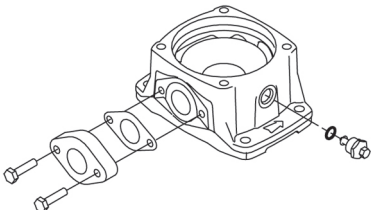
The pump is fitted with a balanced O-ring seal unit with a rigid torque-transmission system.

This seal type is assembled in a cartridge unit which makes replacement safe and easy.

Due to the balancing, this seal type is suitable for high-pressure applications.

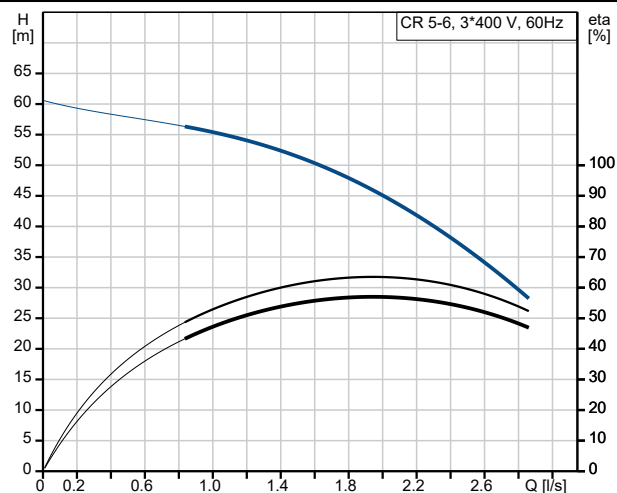
The cartridge construction also protects the pump shaft from possible wear from a dynamic O-ring between pump shaft and shaft seal.

Seal faces:

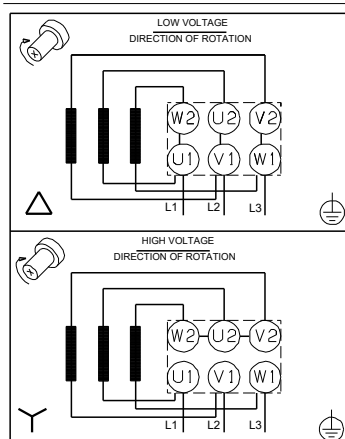
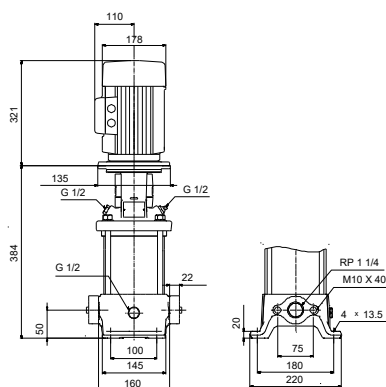
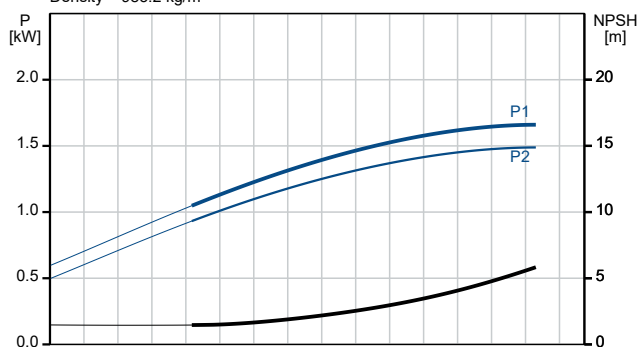
Qty.	Description
1	<ul style="list-style-type: none"> Rotating seal ring material: silicon carbide (SiC) Stationary seat material: carbon graphite, resin-impregnated <p>This material pairing has a very good corrosion resistance and is especially suitable for water up to 90 °C. The seal life will be reduced significantly at temperatures above 90 °C. The material pairing is not recommended for liquids containing particles as this will result in heavy wear on the SiC face.</p> <p>Secondary seal material: EPDM (ethylene-propylene rubber) EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.</p>  <p>The shaft seal is screwed into the pump head.</p> <p>The chambers and impellers are made of stainless-steel sheet. The chambers are provided with a PTFE neck ring offering improved sealing and high efficiency. The impellers have smooth surfaces, and the shape of the blades ensure a high efficiency.</p> <p>The base is made of cast iron. The oval flanges are bolted to the base. The outlet side of the base has a combined drain plug and bypass valve. The pump is secured to the foundation by four bolts through the base plate.</p>  <p>Motor</p> <p>The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. The motor is flange-mounted with tapped-hole flange (FT).</p> <p>Motor-mounting designation in accordance with IEC 60034-7: IM B 14 (Code I) / IM 3601 (Code II).</p> <p>Electrical tolerances comply with IEC 60034.</p> <p>The motor efficiency is classified as premium efficiency in accordance with EISA2007.</p> <p>The motor does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (I₁/1).</p> <p>The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.</p> <p>Technical data</p> <p>Liquid:</p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: 0 .. 120 °C</p> <p>Selected liquid temperature: 60 °C</p> <p>Density: 983.2 kg/m³</p> <p>Technical:</p> <p>Pump speed on which pump data are based: 3501 rpm</p> <p>Rated flow: 1.917 l/s</p> <p>Rated head: 46.8 m</p> <p>Pump orientation: Vertical</p> <p>Shaft seal arrangement: Single</p> <p>Primary shaft seal: HQBE</p>

Qty.	Description
1	<p>Code for shaft seal: HQBE</p> <p>Approvals: CE,EAC,UKCA,SEPRO</p> <p>Approvals for drinking water: WRAS</p> <p>Curve tolerance: ISO9906:2012 3B</p> <p>Materials:</p> <p>Base: Cast iron EN 1561 EN-GJL-200 ASTM A48-25B</p> <p>Impeller: Stainless steel EN 1.4301 AISI 304</p> <p>Bearing: SIC</p> <p>Installation:</p> <p>Maximum ambient temperature: 50 °C</p> <p>Maximum operating pressure: 16 bar</p> <p>Max pressure at stated temp: 16 bar / 120 °C 16 bar / 0 °C</p> <p>Type of connection: Oval / Rp</p> <p>Size of inlet connection: 1 1/4 inch</p> <p>Size of outlet connection: 1 1/4 inch</p> <p>Pressure rating for connection: PN 16</p> <p>Flange size for motor: FT115</p> <p>Electrical data:</p> <p>Motor standard: IEC</p> <p>Motor type: 90LE</p> <p>Rated power - P2: 2.2 kW</p> <p>Power (P2) required by pump: 2.2 kW</p> <p>Mains frequency: 60 Hz</p> <p>Rated voltage: 3 x 230-277D/400-480Y V</p> <p>Rated current: 7,50-6,95/4,30-4,00 A</p> <p>Starting current: 820-1050 %</p> <p>Cos phi - power factor: 0.88-0.80</p> <p>Rated speed: 3480-3530 rpm</p> <p>IE Efficiency class: NEMA Premium / IE3 60Hz</p> <p>Motor efficiency at full load: 86.5 %</p> <p>Motor efficiency at 3/4 load: 89.5-88.5 %</p> <p>Motor efficiency at 1/2 load: 89.2-86.3 %</p> <p>Number of poles: 2</p> <p>Enclosure class (IEC 34-5): 55 Dust/Jetting</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 99820210</p> <p>Controls:</p> <p>Frequency converter: None</p> <p>Others:</p> <p>Terminal box position: 6</p> <p>Minimum efficiency index, MEI ≥: 0.57</p> <p>Net weight: 35.5 kg</p> <p>Gross weight: 38.3 kg</p> <p>Shipping volume: 0.074 m³</p>

Description	Value
General information:	
Product name:	CR 5-6 A-A-A-E-HQBE
Product No:	On request
EAN number:	On request
Technical:	
Pump speed on which pump data are based:	3501 rpm
Rated flow:	1.917 l/s
Rated head:	46.8 m
Maximum head:	63.8 m
Stages:	6
Impellers:	6
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Primary shaft seal:	HQBE
Code for shaft seal:	HQBE
Approvals:	CE,EAC,UKCA,SEPRO
Approvals for drinking water:	WRAS
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Materials:	
Base:	Cast iron
	EN 1561 EN-GJL-200
	ASTM A48-25B
Impeller:	Stainless steel
	EN 1.4301
	AISI 304
Material code:	A
Code for rubber:	E
Bearing:	SIC
Installation:	
Maximum ambient temperature:	50 °C
Maximum operating pressure:	16 bar
Max pressure at stated temp:	16 bar / 120 °C
	16 bar / 0 °C
Type of connection:	Oval / Rp
Size of inlet connection:	1 1/4 inch
Size of outlet connection:	1 1/4 inch
Pressure rating for connection:	PN 16
Flange size for motor:	FT115
Connect code:	A
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	0 .. 120 °C
Selected liquid temperature:	60 °C
Density:	983.2 kg/m³
Electrical data:	
Motor standard:	IEC
Motor type:	90LE
Rated power - P2:	2.2 kW
Power (P2) required by pump:	2.2 kW
Mains frequency:	60 Hz
Rated voltage:	3 x 230-277D/400-480Y V
Rated current:	7,50-6,95/4,30-4,00 A
Starting current:	820-1050 %



Pumped liquid = Water
Liquid temperature during operation = 60 °C
Density = 983.2 kg/m³





Company name: Modern pumps Co.

Created by:

Phone:

Email:

Date:

Description	Value
Cos phi - power factor:	0.88-0.80
Rated speed:	3480-3530 rpm
IE Efficiency class:	NEMA Premium / IE3 60Hz
Motor efficiency at full load:	86.5 %
Motor efficiency at 3/4 load:	89.5-88.5 %
Motor efficiency at 1/2 load:	89.2-86.3 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Built-in motor protection:	NONE
Motor No:	99820210
Controls:	
Frequency converter:	None
Others:	
Terminal box position:	6
Minimum efficiency index, MEI \geq :	0.57
Net weight:	35.5 kg
Gross weight:	38.3 kg
Shipping volume:	0.074 m ³
Sales region:	Saudi Arabia

